DNREC Well Viewer

Getting Started

Version 1.1

DNREC DIVISION OF WATER | Resource Protection Section

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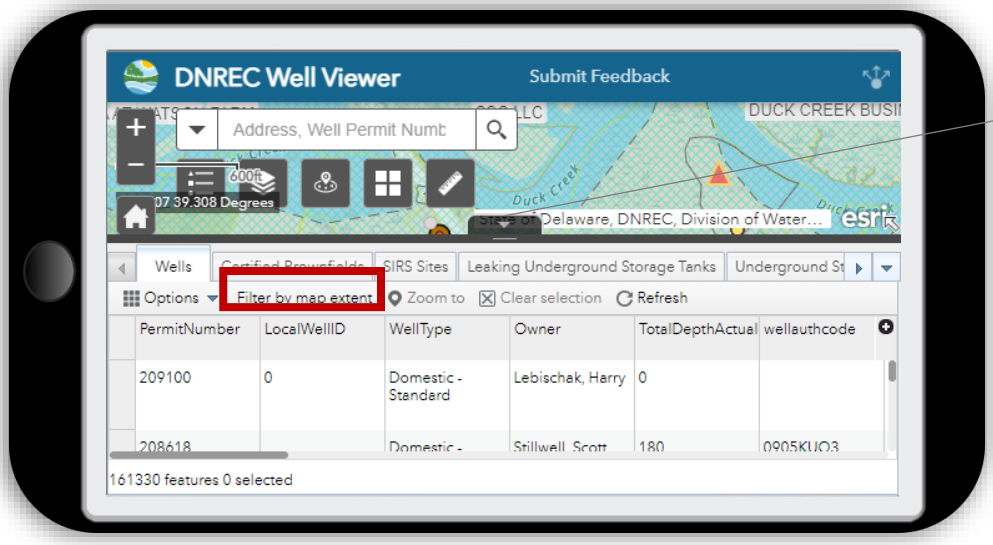
Breakdown of App Tools



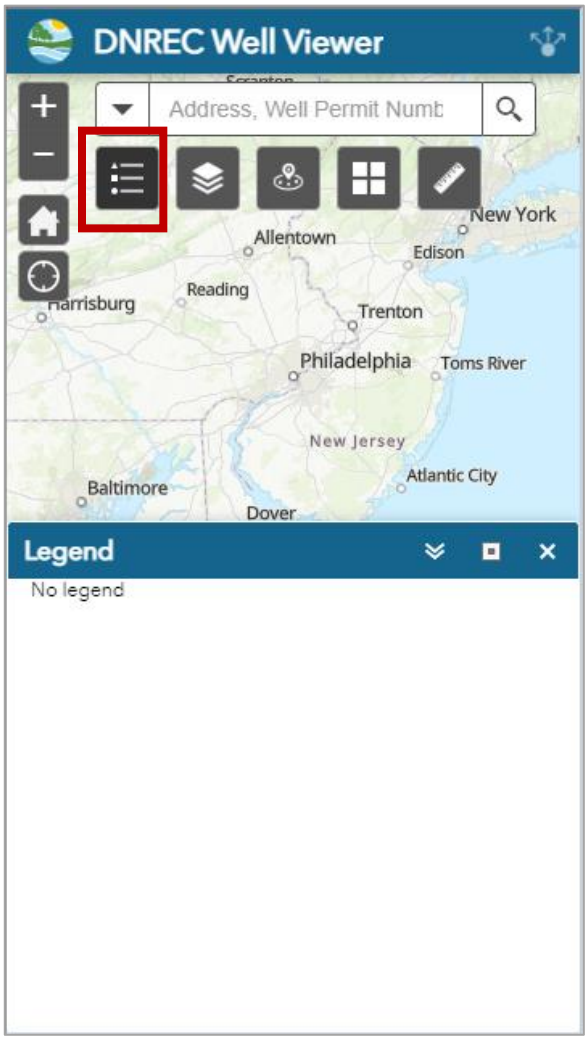
Pull up on tab to see well data.

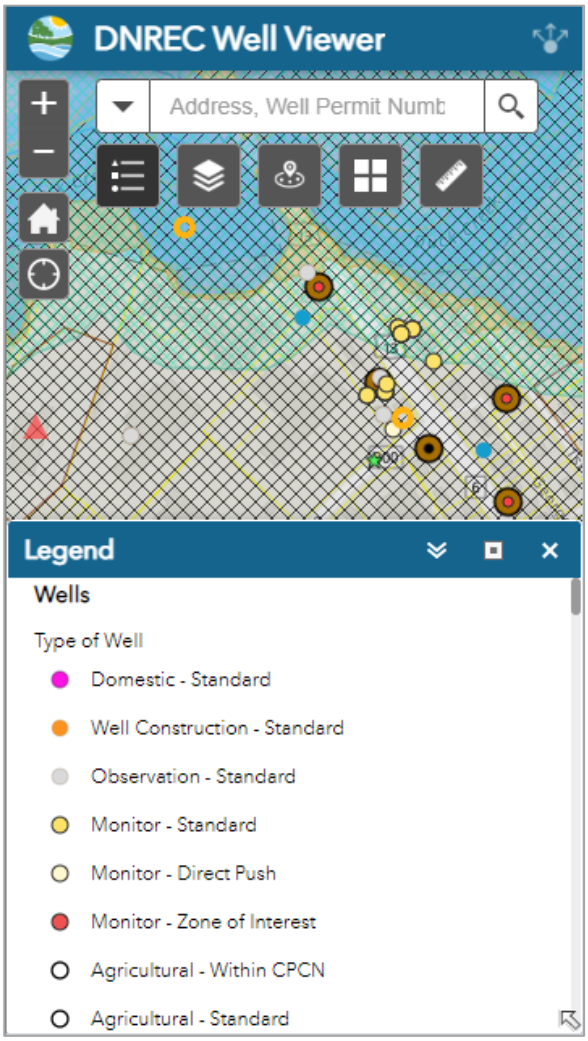
Click **Filter by map extent** to show all wells and not just those that are not covered by the table.

Getting Started with DNREC Well Viewer

Legend Tool

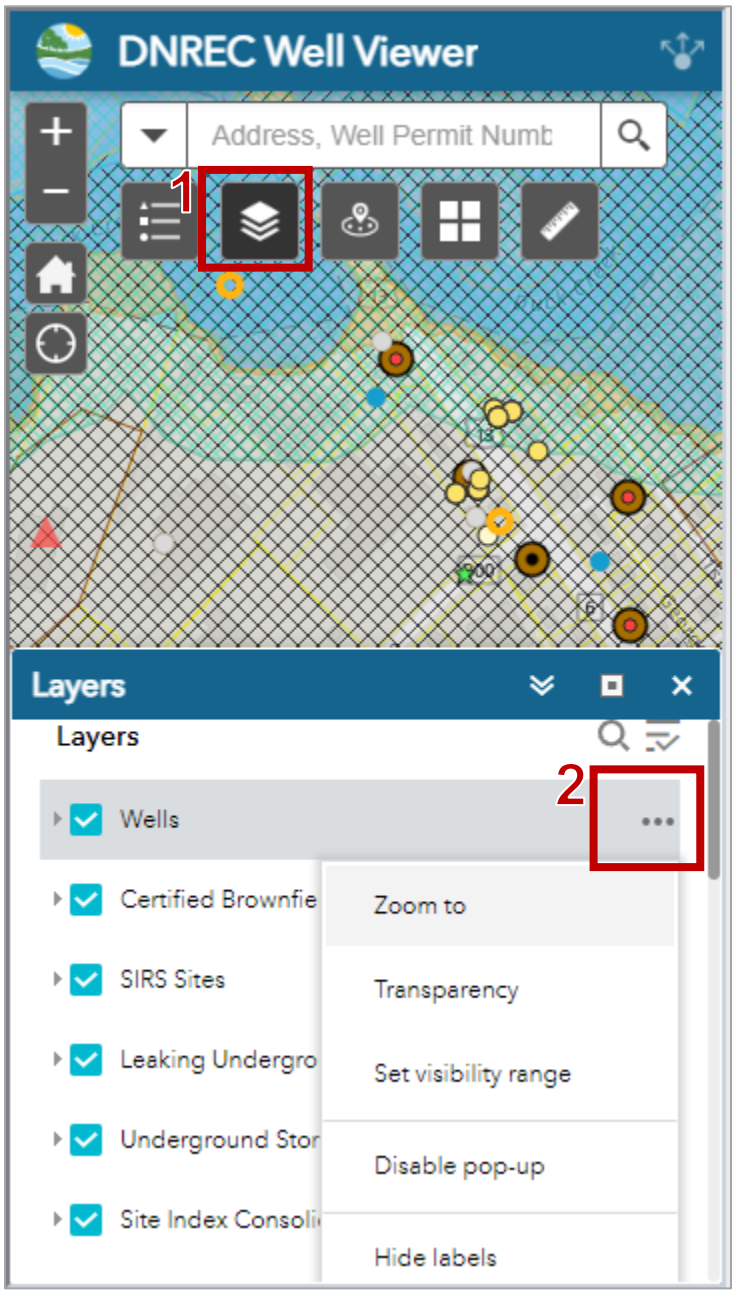
The legend only shows the layers that are currently on the map. Zoom into an area if it appears blank at first.





Layer Tool

The layers tool allows you to customize the map. Change the menu settings to determine what information shows up in the app.



Click on the ... menu button to see available options

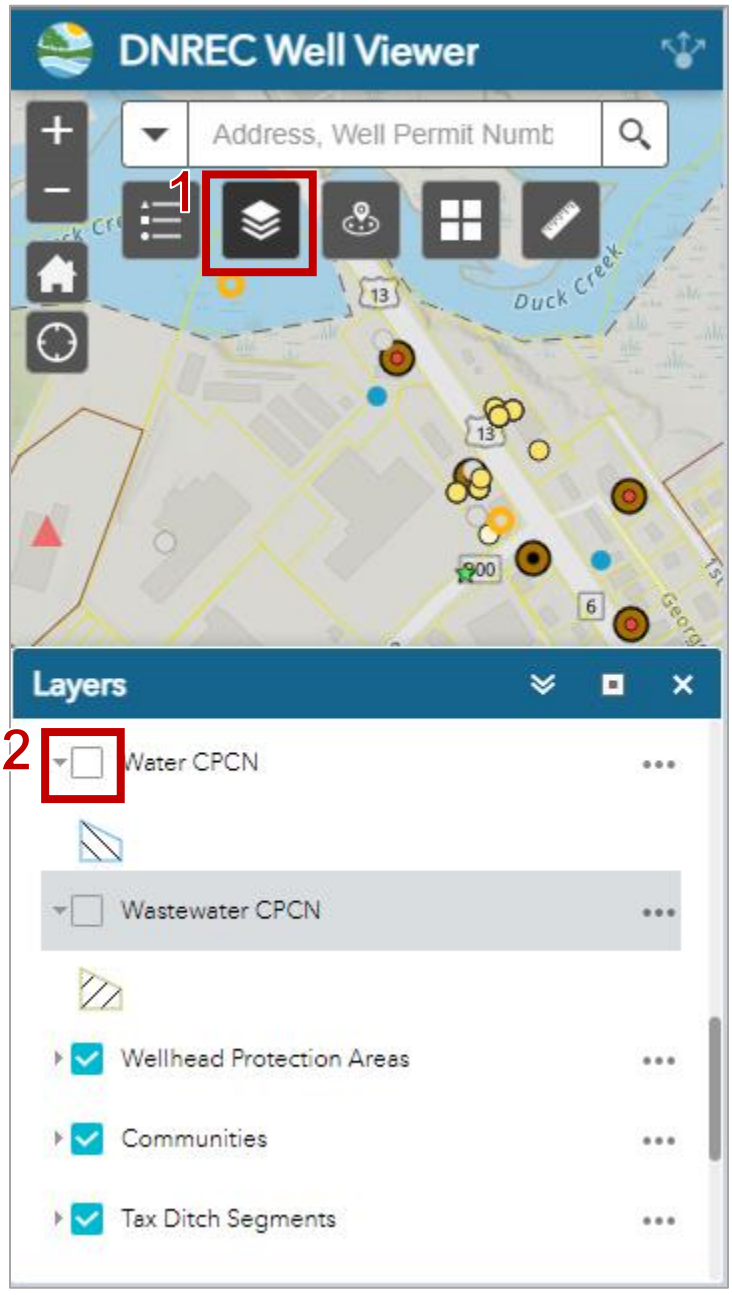
Click on the **Zoom to** button to zoom the extent of the statewide layer

Use the **Transparency** button to make a layer more see through.

To stop a layer from loading when you are zoomed in or out adjust the **visibility range**.

Turn off or on the **labels** for a specific layer.

The layers tool allows you to uncheck layers to turn them off.



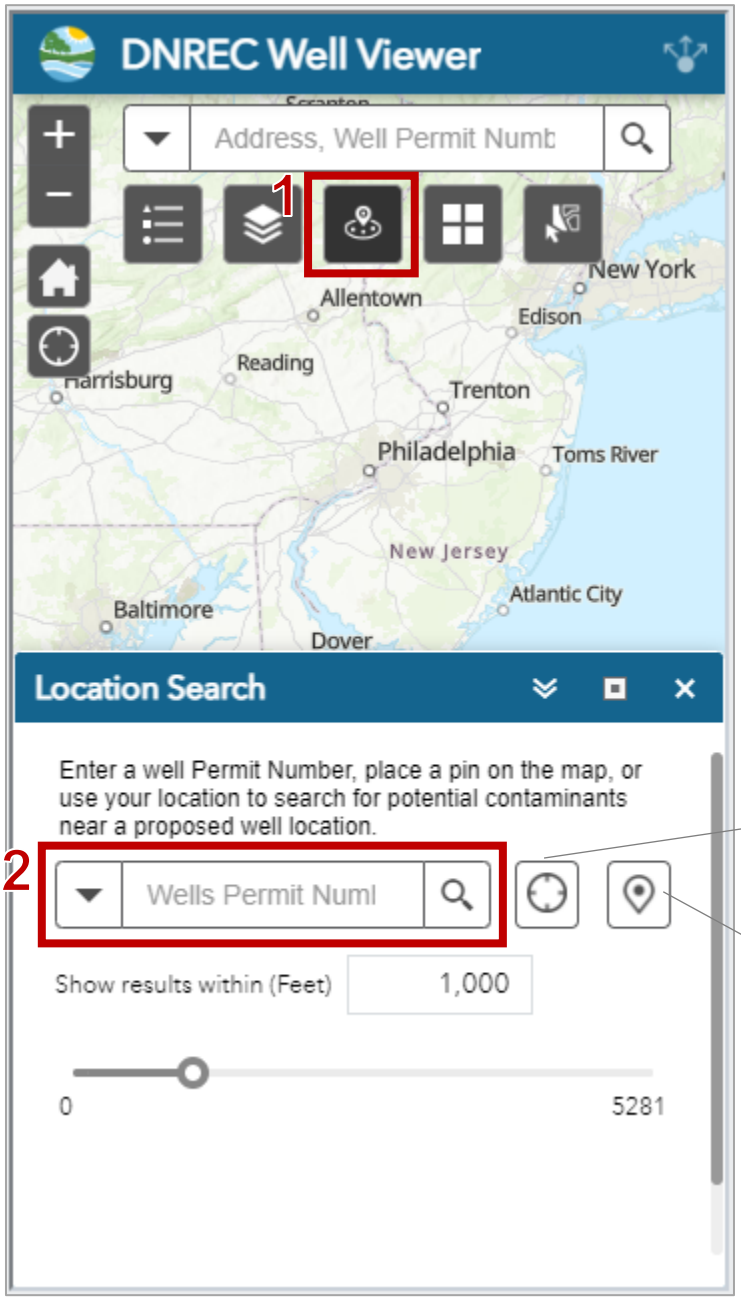
Click on the **blue checkbox** button to turn a layer off.

Click the triangle button to the left of the check box to show what that layer looks like on the map.

Location Review Tool

To check for nearby potential sources of contamination use the Location Review tool.

1. Click on the **Location Search** tool. 
2. Enter the **Well Permit Number** or site address and hit enter.

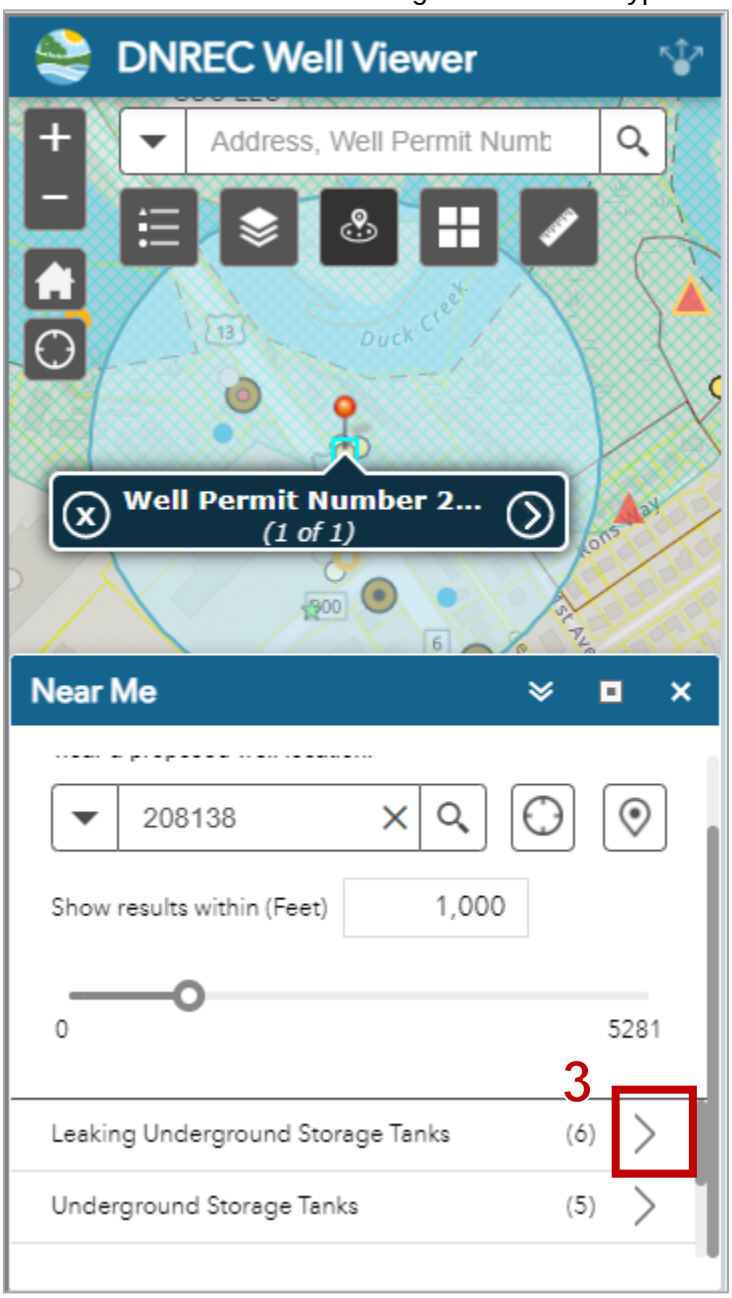


Click on the **Find my location** tool to zoom to where you are standing.

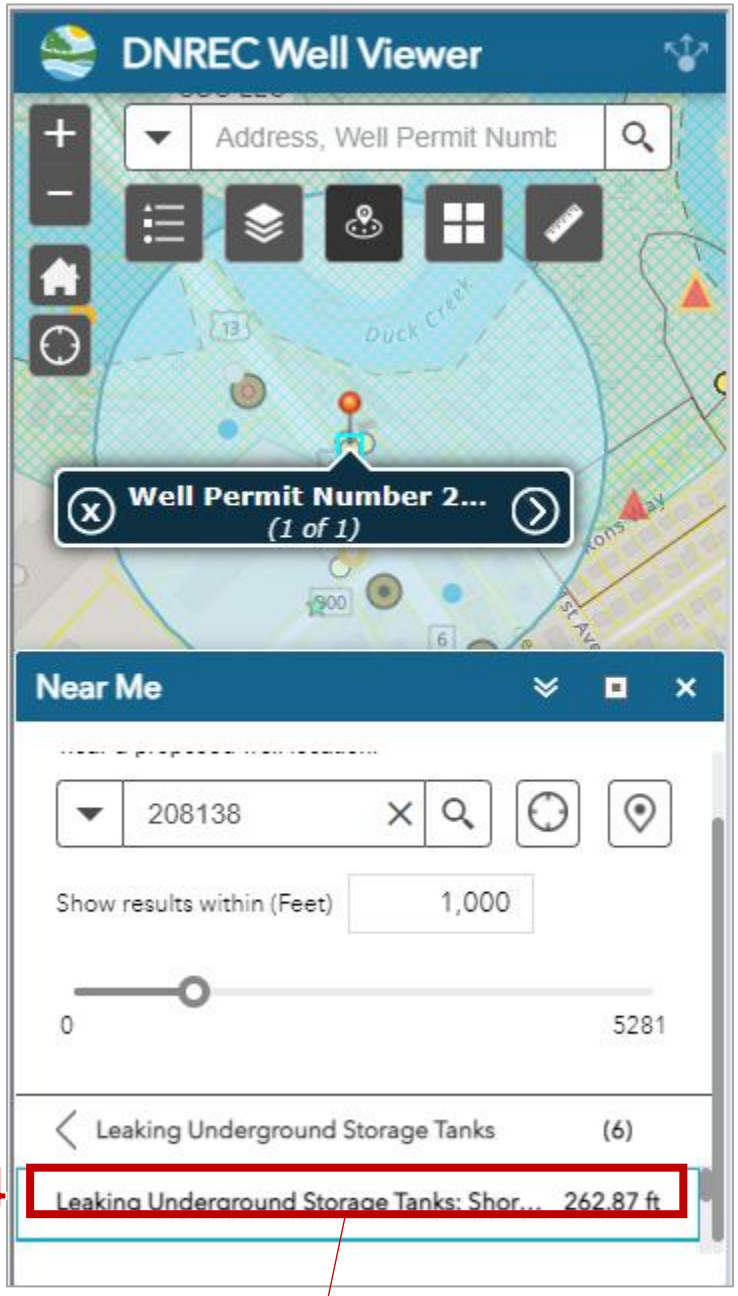
Use the **Set Location** button to drop a pin to a proposed well location.

NOTE: The default distance for DNREC contamination reviews is 1,000 feet.

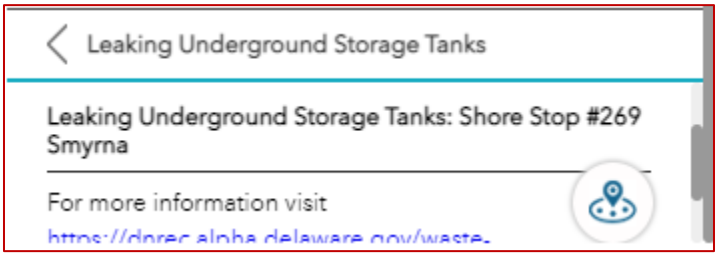
3. Use the **arrow buttons** to the right of each site type to see more information.



4. Click into an **item** in the list again to review more information about a specific site.

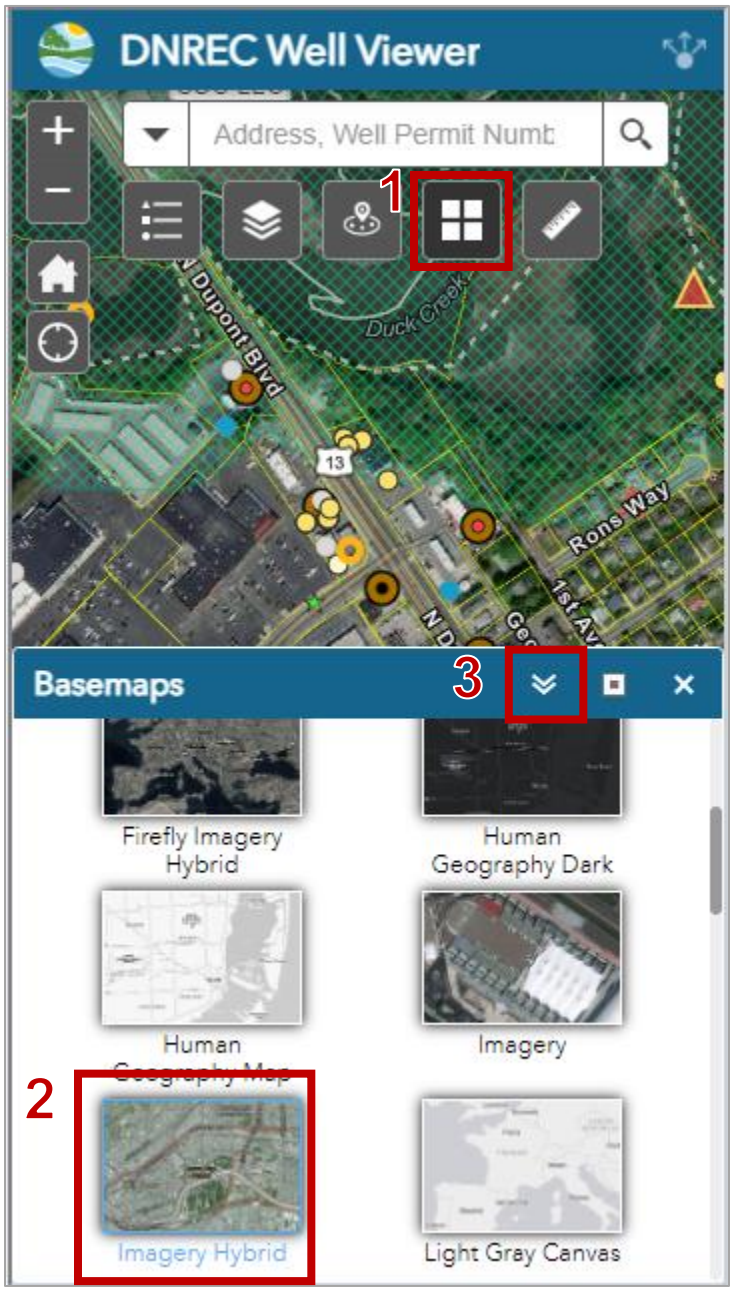


Use the scrolling bar on the side to review all the sites.



Basemap Tool

To switch the map beneath the data click on the Basemap tool.

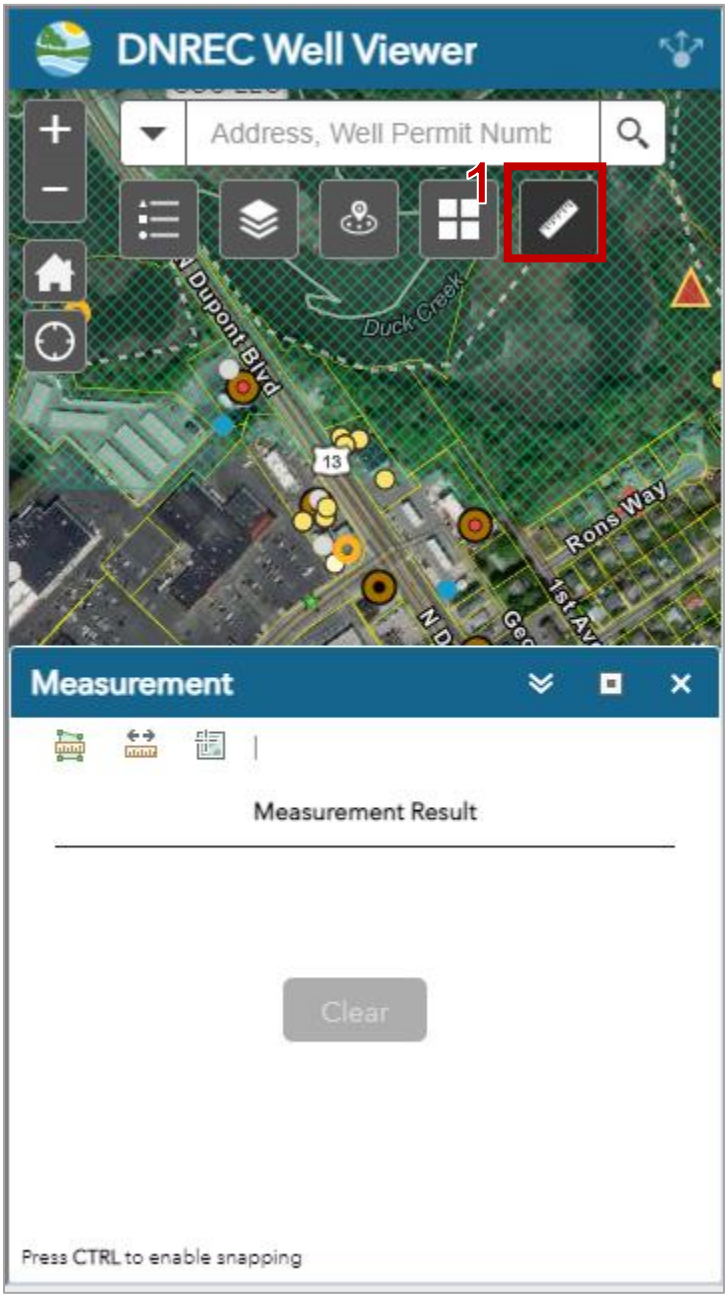


Click on the arrows to minimize a tool on your screen.

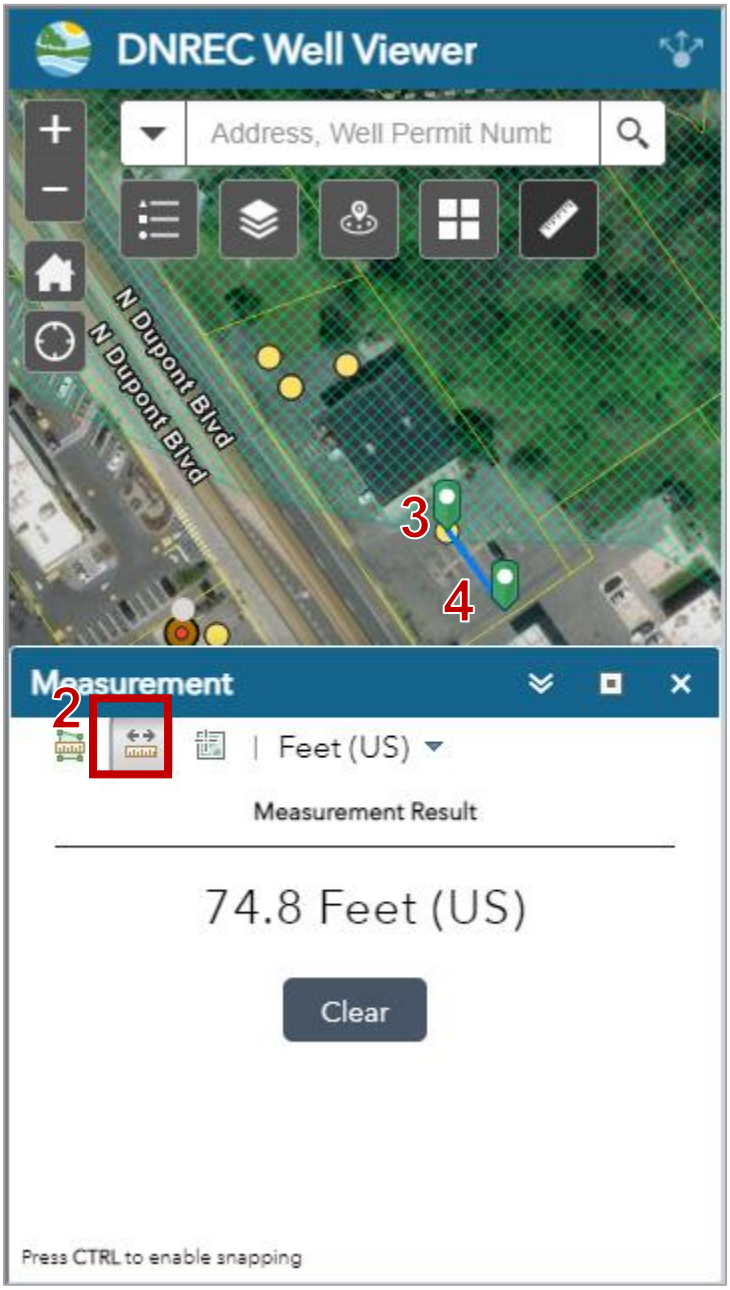
Measure Tool

The select tool allows you to highlight a subset of the data shown on the map.

1. Click on the **Measure** tool  .



2. Click on the green box with a ruler for area, the ruler with dimension arrows for distance, and the map with a crosshair for coordinates.



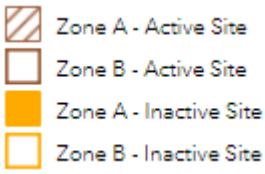
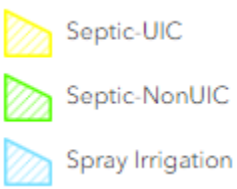
3. For distance click on the map for the starting point and <u>double click</u> to end the measurement result at the ending point.

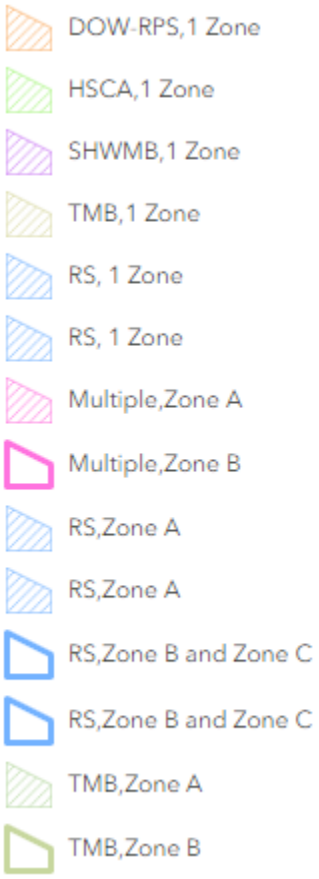
Data Resources Cheat Sheet

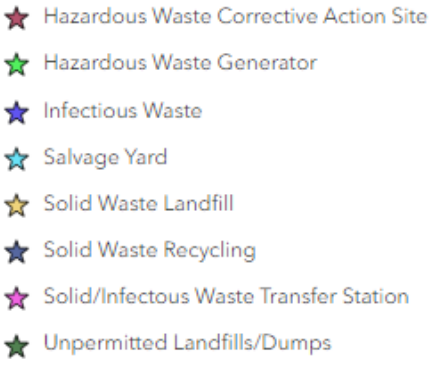
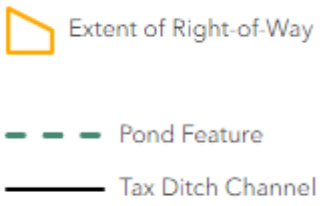
FirstMap Data

https://firstmap.delaware.gov/

Symbology	Layer Name	Description
Private Wells Domestic - Standard Irrigation - Standard Monitoring Wells Monitor - Standard Observation - Standard Monitor - Direct Push Monitor - Zone of Interest Agriculture Wells Agricultural - Within CPCN Agricultural - Standard Geothermal Wells Geothermal - Closed Loop Geothermal - Recharge Geothermal - Supply Geothermal - Direct Exchange Remediation Remediation I - Injection Remediation R - Recovery Construction Dewater - Standard Soil Borings - Standard Other	**Non-Public Wells**	Location of wells that are not associated with a Public Water System.

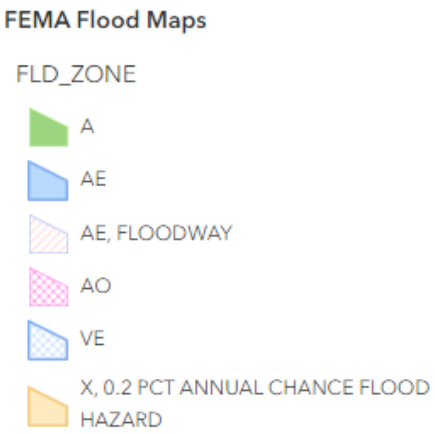
Symbology	Layer Name	Description
	**Delaware Water Service Areas**	Boundaries of service area boundaries for Certificate of Public Convenience and Necessity (CPCN) on file with the Public Service Commission.
	**Wellhead Protection Areas**	Delineated wellhead protection areas around public water supply wells. Wellhead areas are either modeled using specific groundwater modeling software or a fixed radius from the well is applied. The statewide minimum fixed radius is 150 feet.
	**Saltwater Tidal Buffer**	The saltwater tidal boundary as determined for Delaware's updated National Wetlands Inventory for tidal wetlands.
	**Biosolids and Residuals**	This layer includes land application sites where non-hazardous waste residuals were beneficially reused via land application. For sites where beneficial reuse of wastewater via spray irrigation has been approved please see the Spray Irrigation layer.
	**Site Index Consolidated**	Sites that have been identified as part of the Source Water Assessment and Protection Program that may present as a potential source of contamination in groundwater.
	**Large Systems**	Sites where wastewater is applied to the ground.

Symbology	Layer Name	Description
	**Groundwater Management Zones**	Groundwater Management Zones or "GMZs" delineate areas where the potential for degraded groundwater quality exists. Some GMZs place formal restrictions on well installations and groundwater usage. The GMZ coverage dates back to the 1990s, but it is periodically updated.
	**Sussex County Landfills**	Sussex County Landfill Groundwater Management Zones (GMZs). The GMZs consist of three (3) concentric areas: No Wells zone; Zone A - unconfined wells may be pumped no more than 10 gpm; and Zone B - unconfined wells may be pumped no more than 100 gpm.
	**Certified Brownfields**	A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.
	**SIRS Site**	Site Investigation and Restoration Section (SIRS) program site location.

Symbology	Layer Name	Description
	**Underground Storage Tank**	Location of Underground Storage Tanks (UST). Tank locations are updated as part of the daily business processes within the Division of Waste and Hazardous Substances.
	Leaking Underground Storage Tank	Location of Leaking USTs. Tank locations are updated as part of the daily business processes within the Division of Waste and Hazardous Substances.
	**Solid and Hazardous Waste**	Solid and Hazardous Waste Sites from the Environmental Protection Agency. Waste site locations are updated by the EPA's RCRA reporting data.
	**SIRS Projects**	Site Investigation and Restoration Section (SIRS) program project boundary.
	**Tax Ditches**	A tax ditch is a governmental subdivision of the State. It is a watershed-based organization of landowners formed by a prescribed legal process in Superior Court.

Hydrology

https://enterprise.firstmap.delaware.gov/arcgis/rest/services/Hydrology

Symbology	Layer Name	Description
	**FEMA Flood Maps**	The National Flood Hazard Layer (NFHL) data incorporates all Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters of Map Revision (LOMRs) that have been issued against those databases since their publication date. It is updated on a monthly basis. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. This file is georeferenced to the Earth's surface using the Geographic Coordinate System (GCS) and North American Datum of 1983.

Delaware River Basin Commission Data

https://www.state.nj.us/drbc/basin/map/GIS.html

Symbology	Layer Name	Description
	DE River Basin Boundary	The geographic extent of land areas that drain into the Delaware River.

Questions and Answers

What is a Contamination Review?

When a well permit is received the proposed location of the well is passed through a series of spatial queries that determine if a contamination review is required by a hydrologist on staff. The hydrologist reviews the location with respect to known information about the site in order to make recommendations to the applicant.

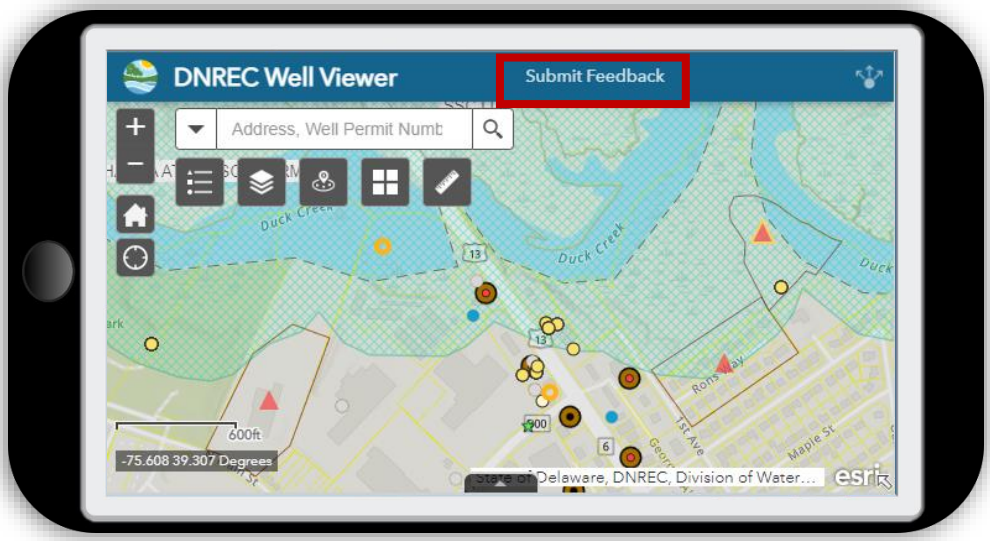
The information about past groundwater contamination associated with a site is ranked using the Maximum Groundwater Contaminant Potential Rating (Max GW). These ratings range from 0 (Negligible) to 5 (High) and sites that have not been assigned a rating are given a Max GW value of –1 (Unknown).

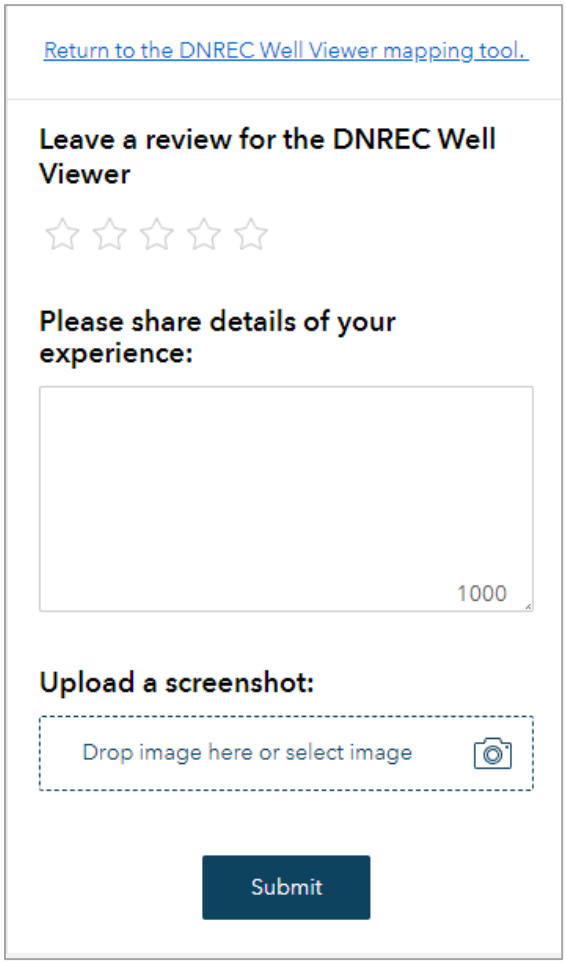
Ratings of –1, 5, or 6 are used in the spatial query that results in a hydro-contamination review. All site types below are used to trigger a flag that there Is a Potential Contaminant in Vicinity (PCIV).

Groundwater Management Zone	If point falls within Groundwater Management Zone polygon
Leaking Underground Storage Tank	If within a 1000 ft buffer
Biosolids and Residuals	If point falls within polygon of field or Groundwater Management Zone
Spray Irrigation	If point falls within polygon of field or Groundwater Management Zone
Sussex County Landfills	If point falls within polygon of landfill or Groundwater Management Zone
SIRS Site (points)	If within a 1000 ft buffer
Site Index Consolidated	If within a 1000 ft buffer
Underground Storage Tank	If within a 1000 ft buffer

How do I report bugs?

The Submit Feedback link is in the initial pop-up and in the blue header of the app. Depending on the screen size of your mobile device the link may not come up. Try rotating the device horizontal and see if the link appears.

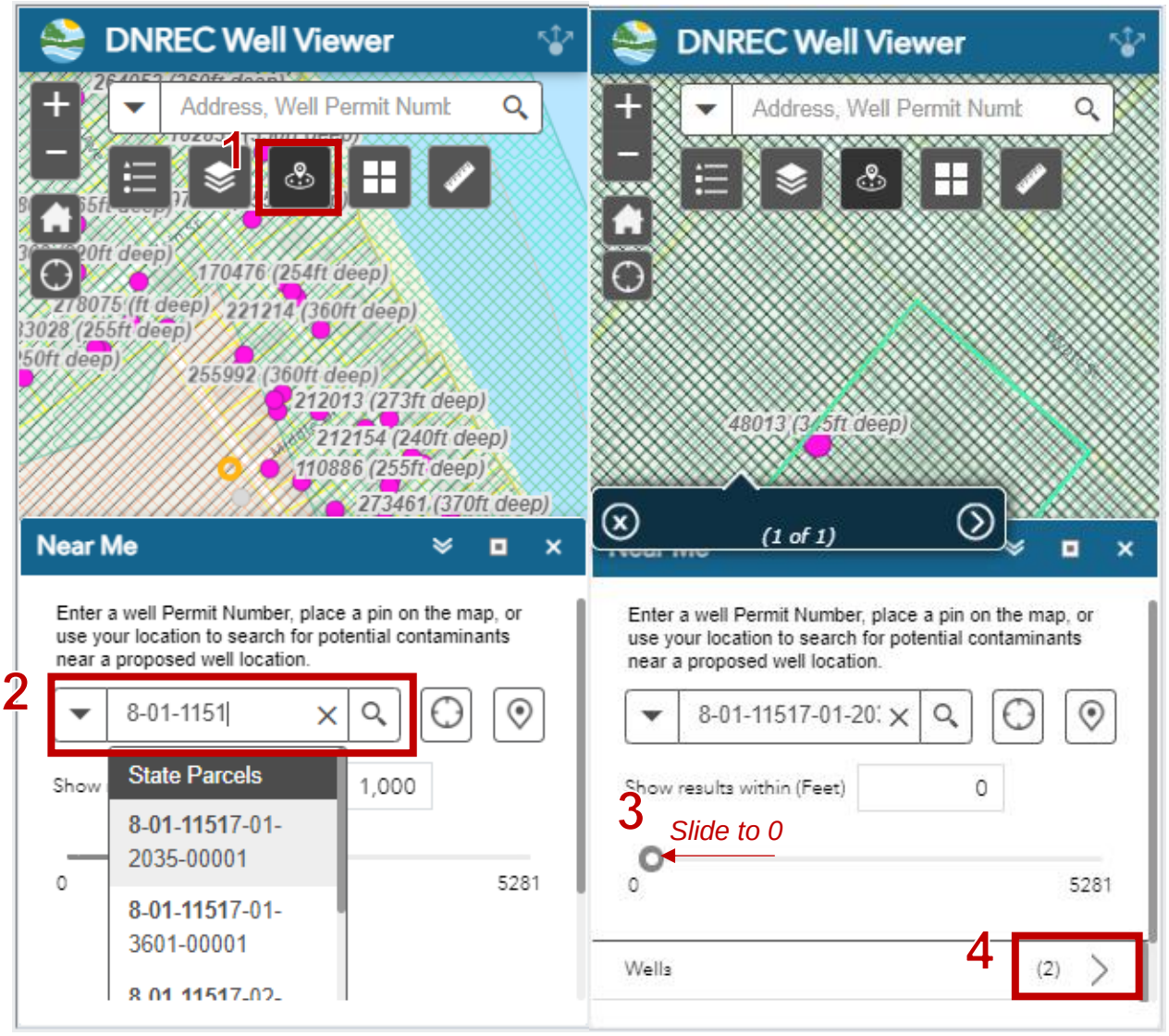




Once the feedback form appears feel free to leave your contact information in the text box for a DNREC representative contact you regarding any technical issues.

How do I see what wells are on my property?

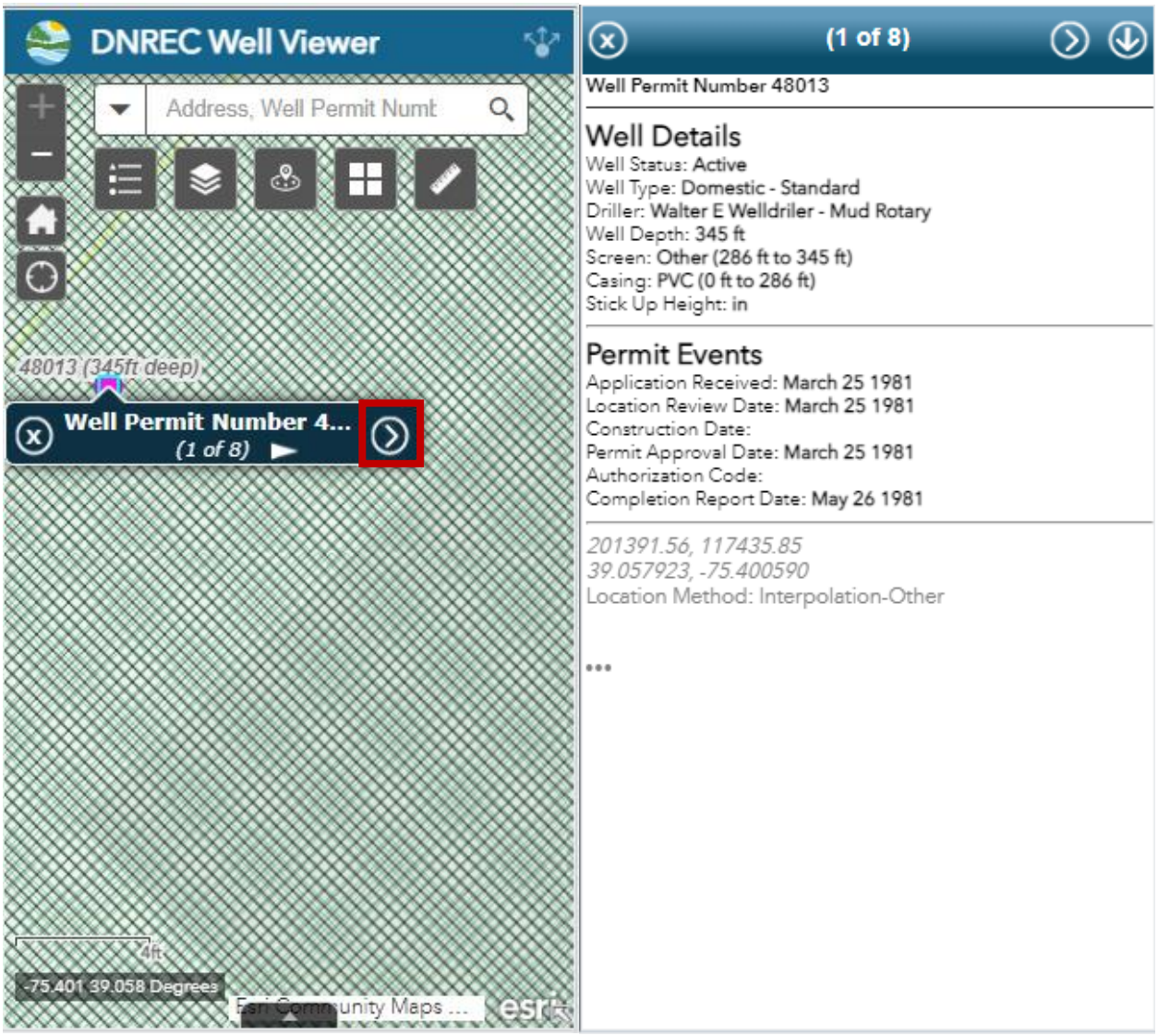
1. Click on the Location Search tool
2. Search for your parcel
3. Set the buffer distance is set to zero.



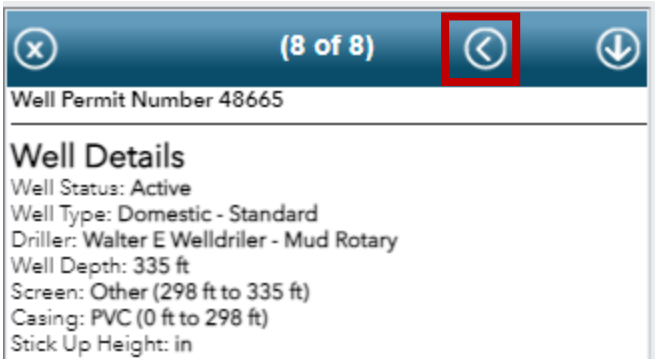
4. Click into the search results to see what wells are on your property.

How do I see the well permit details?

To view the well permit details at full screen **click on the well** on the map and then click on the arrow.



Use the arrows in the blue header to scroll through site records.



How do I find my parcel number?

Use the My Location button or address search to navigate to a property. Then click on the site and scroll through the pop-ups until you see the parcel details.